

## 210-101W Water Temperature Sensor



The **210-101W Water Temperature Sensor** is a rugged and reliable device for highly accurate submersible water temperature or soil temperature measurement. It produces a 4-20 mA output signal, which is an industrial standard for process control monitoring. Most PLCs (Programmable Logic Controllers), SCADA equipment, and data acquisition systems accept this signal directly.

If a voltage signal is required, the sensor output may be converted by reading the voltage across a precision resistor in series with the signal wire. When the 4-20 mA signal is dropped across a 250 ohm resistor, the output will be 1-5 Vdc.

The 210-101W sensor probe is molded to 25 feet of marine grade FEP jacketed 2-conductor 20AWG MIL spec MS22759 wire. Additional cable lengths up to 500 feet are available.

The 210-101W has a two-wire configuration, 4-20 mA loop power. The unit's electronics are completely encapsulated in water-resistant potting compound inside the stainless steel housing.

## **Specifications**

Output: 4-20 mA (loop configuration)

Range:  $-50^{\circ}$ C to  $+50^{\circ}$ C ( $-58^{\circ}$ F to  $122^{\circ}$ F) 4 mA =  $-50^{\circ}$ , 20 mA =  $+50^{\circ}$ C Accuracy:  $\pm 0.2^{\circ}$ C or  $\pm 0.4^{\circ}$ F, factory calibrated 0.01% linear output

Sensor element: 1000 ohm platinum resistance

Probe housing: 3/8" 304/316 stainless steel, sealed tube

Signal conditioner: Built-in RTD transmitter

Operating voltage: 12 to 40 Vdc Current draw: Same as sensor output

Warm-up time: 2 seconds

Operating temperature: -50 to 50°C (-58 to 122°F) Size of probe assembly: 3/8" diameter x 6" long , 12 oz

Cable: 25' 2-conductor teflon FEP

## Ordering Information

210-101W

Water/Soil Temperature Sensor 2-wire 4-20 mA loop powered includes 25' cable